

Title (en)  
LITHIUM MANGANESE PHOSPHATE NANOPARTICLES AND METHOD FOR MANUFACTURING SAME, CARBON-COATED LITHIUM MANGANESE PHOSPHATE NANOPARTICLES, CARBON-COATED LITHIUM MANGANESE PHOSPHATE NANOPARTICLE GRANULATED BODY, AND LITHIUM ION CELL

Title (de)  
LITHIUMMANGANPHOSPHATNANOPARTIKEL UND VERFAHREN ZUR HERSTELLUNG DAVON, KOHLENSTOFFBESCHICHTETE LITHIUMMANGANPHOSPHATNANOPARTIKEL, GRANULATFÖRMIGER KÖRPER AUS KOHLENSTOFFBESCHICHTETEN LITHIUMMANGANPHOSPHATNANOPARTIKEN UND LITHIUM-IONEN-ZELLE

Title (fr)  
NANOPARTICULES DE PHOSPHATE DE LITHIUM MANGANÈSE ET PROCÉDÉ POUR LES FABRIQUER, NANOPARTICULES DE PHOSPHATE DE LITHIUM MANGANÈSE ENROBÉES DE CARBONE, CORPS GRANULÉ EN NANOPARTICULES DE PHOSPHATE DE LITHIUM MANGANÈSE ENROBÉES DE CARBONE, ET PILE À IONS LITHIUM

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Application  
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Abstract (en)  
[origin: US2017352879A1] The present invention makes a lithium ion secondary cell exhibit high capacity when lithium manganese phosphate is used as the active material of the lithium ion secondary cell. The present invention is directed to lithium manganese phosphate nanoparticles having a ratio I20/I29 of the peak intensity at 20° to the peak intensity at 29° obtained by X-ray diffraction of greater than or equal to 0.88 and less than or equal to 1.05, and a crystallite size determined by X-ray diffraction of greater than or equal to 10 nm and less than or equal to 50 nm.

IPC 8 full level  
**C01B 25/45** (2006.01); **H01M 4/36** (2006.01); **H01M 4/58** (2010.01)

CPC (source: EP KR US)  
**C01B 25/45** (2013.01 - EP KR US); **C01B 32/05** (2017.07 - KR); **H01M 4/133** (2013.01 - US); **H01M 4/136** (2013.01 - US); **H01M 4/366** (2013.01 - EP KR US); **H01M 4/505** (2013.01 - US); **H01M 4/5825** (2013.01 - EP KR US); **H01M 4/583** (2013.01 - US); **H01M 4/587** (2013.01 - EP US); **H01M 4/625** (2013.01 - EP US); **H01M 10/0525** (2013.01 - EP KR US); **C01P 2002/74** (2013.01 - EP KR US); **C01P 2004/50** (2013.01 - KR); **C01P 2004/61** (2013.01 - EP KR US); **C01P 2004/62** (2013.01 - KR); **C01P 2004/64** (2013.01 - KR US); **C01P 2004/80** (2013.01 - US); **C01P 2006/40** (2013.01 - KR US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/70** (2013.01 - US)

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**US 10181601 B2 20190115; US 2017352879 A1 20171207**; CA 2977349 A1 20161006; CA 2977349 C 20201006; CN 107428535 A 20171201; CN 107428535 B 20201204; EP 3279137 A1 20180207; EP 3279137 A4 20181205; JP 6729369 B2 20200722; JP WO2016158566 A1 20180222; KR 102145248 B1 20200818; KR 20170133387 A 20171205; TW 201639780 A 20161116; TW I681925 B 20200111; WO 2016158566 A1 20161006

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**US 201715679345 A 20170817**; CA 2977349 A 20160322; CN 201680018183 A 20160322; EP 16772447 A 20160322; JP 2016058975 W 20160322; JP 2016518223 A 20160322; KR 20177029810 A 20160322; TW 105109614 A 20160328